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PATENT DEPARTMENT (51851)
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EXAMINER	
BIAGINI, CHRISTOPHER D	

ART UNIT	PAPER NUMBER
2445	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/092,158	WIES ET AL.	
	Examiner	Art Unit	
	CHRISTOPHER BIAGINI	2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *80-90,92-101 and 103-109* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *80-90, 92-101, 103-109* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This communication is in response to the Request for Continued Examination (RCE) filed July 13, 2011. Claims 80-90, 92-101, and 103-105 are pending.

Response to Arguments

Applicant's arguments with respect to the rejections under 35 USC 102 and 103 have been fully considered and are persuasive in light of the amendments. Accordingly, the rejections are withdrawn. However, upon further consideration, new grounds of rejection are made.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 106-109 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each of claims 106-109 further limit elements which are only recited in the alternative in their parent claims. For example, claim 80 recites "at least one of a web page, a script, or a program," and claim 106 recites "wherein the script or program comprises a java applet or an ActiveX control." It is not clear what effect these dependent claims have when considering an embodiment of their parent claims that does not include a script or a program. In other words, for

purposes of anticipation or infringement, if a hypothetical system meets the limitations of claim 80 by using a web page, it is not clear how claim 106 further limits claim 80. Claims 107-109 present a similar issue.

Furthermore, it is not clear how, as recited in each of claims 106-109, a "script" can comprise "a java applet or an ActiveX control." As is understood in the art, the term "script" generally refers to sequences of instructions which are interpreted or compiled at runtime. Examples of scripts include JavaScript. By contrast, Java applets and ActiveX controls are compiled in advance. This interpretation is consistent with the instant specification, which gives VBScript and JavaScript as examples of *scripts*, and Java applets and ActiveX controls as examples of *programs* which provide functionality "that would normally be difficult, or even impossible, using HTML or scripting languages" (see p. 2, lines 22-35).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 80-90, 92-101, 104, and 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (US Patent No. 5,742,278) in view of Reeder (US Patent No. 6,141,652).

Regarding claim 80, Chen shows a method comprising:

- receiving an input signal (application program 40: see Fig. 1, col. 4, lines 4-15), the input signal comprising program code having an embedded force feedback command (see col. 6, lines 32-42, showing C program code having embedded force feedback commands in the form of API calls);
- extracting the force feedback command from the input signal (comprising executing the program: see col. 3, lines 43-57 and col. 4, lines 4-15);
- generating an output signal based on the force feedback command (comprising a signal to DSP 30: see Fig. 1 and col. 4, lines 12-18 and 26-28);
- wherein the program code is embedded in a program (see col. 3, lines 43-57 and col. 6, lines 32-42).

Chen does not explicitly show that the input signal is received from a network.

Reeder shows receiving an input signal with embedded program code from a network (comprising receiving a network transmission containing a program: see col. 5, lines 50-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen to receive the input signal with embedded program code over a network as taught by Reeder in order to generate revenue for the provider of the programs (see Reeder, col. 4, lines 44-53), and also in order to allow users to use programs that they do not already have stored locally.

Regarding claim 81, Chen in view of Reeder shows the limitations of claim 80 as applied above, and further shows wherein the network comprises the Internet (see Reeder, col. 5, lines 31-35, as combined above).

Regarding claim 82, Chen in view of Reeder shows the limitations of claim 80 as applied above, and further shows wherein the output signal is operable to cause a manipulandum to output a force (see Chen, col. 3, lines 33-36).

Regarding claim 83, Chen in view of Reeder shows the limitations of claim 80 as applied above, and further shows wherein the output signal is operable to cause a force to be output in a simulation device (e.g., a system which can simulate a "springy damper" or an earthquake: see Chen, col. 4, lines 32-38) comprising a processor (see Chen, col. 3, lines 33-36).

Regarding claim 84, Chen in view of Reeder shows the limitations of claim 80 as applied above, and further shows wherein the input signal is a first input signal and further comprising receiving a second input signal from a manipulandum (sensor signals from a joystick, which indicate its position: see Chen, col. 3, lines 28-30).

Regarding claim 85, Chen in view of Reeder shows the limitations of claim 84 as applied above, and further shows wherein the output signal is further associated with the second input signal (note that the output signal can be programmed to vary according to the position and speed of the joystick: see Chen, col. 4, line 40 to col. 5, line 8).

Regarding claim 86, Chen in view of Reeder shows the limitations of claim 80 as applied above, and further shows wherein the force feedback command comprises a first force feedback command and further comprising:

- receiving the output signal (e.g., receiving the signal at DSP 30: see Chen, col. 4, lines 12-20); and
- overriding the first force feedback command with a second force feedback command (e.g., overriding a command that invoked an effect with a command to cancel the effect or a command to overlap another effect on top of it: see Chen, col. 4, lines 28-36 and col. 10, lines 19-32).

Regarding claim 87, Chen in view of Reeder shows the limitations of claim 86 as applied above, and further shows wherein the first force feedback command comprises an authored force feedback command (e.g., "authored" by the programmer who writes the program code: see Chen, col. 3, lines 51-57).

Regarding claim 88, Chen in view of Reeder shows the limitations of claim 86 as applied above, and further shows wherein the second force feedback command comprises a generic force feedback command (for example a command to create a basic, built-in effect, which is "generic" because it "may be used to create a wide variety of effects adequate for many different applications," as opposed to a non-generic command, which would be specialized to particular applications: see Chen, col. 5, lines 40-45; col. 9, lines 48-54; and col. 11, lines 24-41).

Regarding claim 89, Chen in view of Reeder shows the limitations of claim 86 as applied above, and further shows generating a force feedback effect associated with the second force feedback command (see Chen, col. 4, lines 28-38).

Regarding claim 90, Chen in view of Reeder shows the limitations of claim 80 as applied above, and further shows receiving the output signal (e.g., receiving the signal at DSP 30: see Chen, col. 4, lines 12-20); and generating a force feedback effect (e.g., a force effect such as a rumble: see Chen, col. 4, lines 28-38).

Regarding claim 92, Chen shows a method comprising:

- receiving program code (application program 40: see Fig. 1, col. 4, lines 4-15) having a force feedback command (see col. 6, lines 32-42, showing C program code having embedded force feedback commands in the form of API calls);
- wherein the program code is embedded in a program (see col. 3, lines 43-57 and col. 6, lines 32-42).

Chen does not explicitly show:

- embedding the program code having the force feedback command in an output signal; and
- transmitting the output signal to a network.

Reeder shows:

- embedding program code in an output signal (necessary in order to create a network transmission that includes a program: see col. 5, lines 50-55); and

- transmitting the output signal to a network (see col. 5, lines 50-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen to embed the program code in an output signal and transmit the output signal over a network as taught by Reeder in order to generate revenue for the provider of the programs (see Reeder, col. 4, lines 44-53), and also in order to allow users to use programs that they do not already have stored locally.

Regarding claim 93, Chen in view of Reeder shows the limitations of claim 92 as applied above, and further shows wherein the network comprises the Internet (see Reeder, col. 5, lines 31-35, as combined above).

Regarding claim 94, Chen in view of Reeder shows the limitations of claim 92 as applied above, and further shows wherein the force feedback command comprises an authored force feedback command (e.g., "authored" by the programmer who writes the program code: see Chen, col. 3, lines 51-57).

Regarding claim 95, Chen shows a non-transitory computer-readable medium (at least implicitly disclosed as a necessary component of personal computer 12: see Fig. 1 and col. 3, lines 13-17 and 44-51) storing instructions to cause a processor to:

- receive an input signal (application program 40: see Fig. 1, col. 4, lines 4-15), the input signal comprising program code having an embedded force feedback

command (see col. 6, lines 32-42, showing C program code having embedded force feedback commands in the form of API calls);

- extract the force feedback command from the input signal (comprising executing the program: see col. 3, lines 43-57 and col. 4, lines 4-15);
- generate an output signal based on the force feedback command (comprising a signal to DSP 30: see Fig. 1 and col. 4, lines 12-18 and 26-28);
- wherein the program code is embedded in a program (see col. 3, lines 43-57 and col. 6, lines 32-42).

Chen does not explicitly show that the input signal is received from a network.

Reeder shows receiving an input signal with embedded program code from a network (comprising receiving a network transmission containing a program: see col. 5, lines 50-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen to receive the input signal with embedded program code over a network as taught by Reeder in order to generate revenue for the provider of the programs (see Reeder, col. 4, lines 44-53), and also in order to allow users to use programs that they do not already have stored locally.

Regarding claim 96, Chen in view of Reeder shows the limitations of claim 95 as applied above, and further shows wherein the input signal is a first input signal and further comprising instructions to receive a second input signal from a manipulandum (sensor signals from a joystick, which indicate its position: see Chen, col. 3, lines 28-30).

Regarding claim 97, Chen in view of Reeder shows the limitations of claim 95 as applied above, and further shows wherein the force feedback command comprises a first force feedback command and further comprising instructions to:

- receive the output signal (e.g., receiving the signal at DSP 30: see Chen, col. 4, lines 12-20); and
- override the first force feedback command with a second force feedback command (e.g., overriding a command that invoked an effect with a command to cancel the effect or a command to overlap another effect on top of it: see Chen, col. 4, lines 28-36 and col. 10, lines 19-32).

Regarding claim 98, Chen in view of Reeder shows the limitations of claim 97 as applied above, and further shows wherein the first force feedback command comprises an authored force feedback command (e.g., "authored" by the programmer who writes the program code: see Chen, col. 3, lines 51-57).

Regarding claim 99, Chen in view of Reeder shows the limitations of claim 97 as applied above, and further shows wherein the second force feedback command comprises a generic force feedback command (for example a command to create a basic, built-in effect, which is "generic" because it "may be used to create a wide variety of effects adequate for many different applications," as opposed to a non-generic command, which would be specialized to particular applications: see Chen, col. 5, lines 40-45; col. 9, lines 48-54; and col. 11, lines 24-41).

Regarding claim 100, Chen in view of Reeder shows the limitations of claim 97 as applied above, and further shows instructions to generate a force feedback effect associated with the second force feedback command (see Chen, col. 4, lines 28-38).

Regarding claim 101, Chen in view of Reeder shows the limitations of claim 95 as applied above, and further shows instructions to: receive the output signal (e.g., receiving the signal at DSP 30: see Chen, col. 4, lines 12-20); and generate a force feedback (e.g., a force effect such as a rumble: see Chen, col. 4, lines 28-38).

Regarding claim 103, Chen shows a non-transitory computer-readable medium storing instructions to cause a processor (at least implicitly disclosed as a necessary component of personal computer 12: see Fig. 1 and col. 3, lines 13-17 and 44-51) to:

- receive program code (application program 40: see Fig. 1, col. 4, lines 4-15) having a force feedback command (see col. 6, lines 32-42, showing C program code having embedded force feedback commands in the form of API calls);
- wherein the program code is embedded in a program (see col. 3, lines 43-57 and col. 6, lines 32-42).

Chen does not explicitly show:

- embedding the program code having the force feedback command in an output signal; and
- transmitting the output signal to a network.

Reeder shows:

- embedding program code in an output signal (necessary in order to create a network transmission that includes a program: see col. 5, lines 50-55); and
- transmitting the output signal to a network (see col. 5, lines 50-55).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Chen to embed the program code in an output signal and transmit the output signal over a network as taught by Reeder in order to generate revenue for the provider of the programs (see Reeder, col. 4, lines 44-53), and also in order to allow users to use programs that they do not already have stored locally.

Regarding claim 104, Chen in view of Reeder shows the limitations of claim 103 as applied above, and further shows wherein the network comprises the Internet (see Reeder, col. 5, lines 31-35, as combined above).

Regarding claim 105, Chen in view of Reeder shows the limitations of claim 103 as applied above, and further shows wherein the force feedback command comprises an authored force feedback command (e.g., "authored" by the programmer who writes the program code: see Chen, col. 3, lines 51-57).

Claims 106-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (US Patent No. 5,742,278) in view of Reeder (US Patent No. 6,141,652) as applied to claims 80, 92, 95, and 103 above, and further in view of Hanson (US Patent No. 6,148,346).

Regarding claim 106, the combination of Chen and Reeder shows the limitations of claim 80 as applied above, but does not explicitly show wherein the script or program comprises a java applet or an ActiveX control.

Hanson shows a program that controls operation of a peripheral comprising a java applet (comprising a device driver implemented with java applets: see col. 3, lines 15-25 and col. 4, lines 58-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the program of Chen in view of Reeder to comprise a java applet as taught by Hanson in order to easily accommodate host computer systems produced by various manufacturers (see Hanson, col. 3, lines 23-25) by, for example, making the portion of the program written in Java both OS- and processor-independent (see Hanson, col. 4, lines 58-67).

Regarding claim 107, the combination of Chen and Reeder shows the limitations of claim 92 as applied above, but does not explicitly show wherein the script or program comprises a java applet or an ActiveX control.

Hanson shows a program that controls operation of a peripheral comprising a java applet (comprising a device driver implemented with java applets: see col. 3, lines 15-25 and col. 4, lines 58-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the program of Chen in view of Reeder to comprise a java applet as taught by Hanson in order to easily accommodate host computer systems produced by various manufacturers (see

Hanson, col. 3, lines 23-25) by, for example, making the portion of the program written in Java both OS- and processor-independent (see Hanson, col. 4, lines 58-67).

Regarding claim 108, the combination of Chen and Reeder shows the limitations of claim 95 as applied above, but does not explicitly show wherein the script or program comprises a java applet or an ActiveX control.

Hanson shows a program that controls operation of a peripheral comprising a java applet (comprising a device driver implemented with java applets: see col. 3, lines 15-25 and col. 4, lines 58-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the program of Chen in view of Reeder to comprise a java applet as taught by Hanson in order to easily accommodate host computer systems produced by various manufacturers (see Hanson, col. 3, lines 23-25) by, for example, making the portion of the program written in Java both OS- and processor-independent (see Hanson, col. 4, lines 58-67).

Regarding claim 109, the combination of Chen and Reeder shows the limitations of claim 103 as applied above, but does not explicitly show wherein the script or program comprises a java applet or an ActiveX control.

Hanson shows a program that controls operation of a peripheral comprising a java applet (comprising a device driver implemented with java applets: see col. 3, lines 15-25 and col. 4, lines 58-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the program of Chen in view of Reeder to comprise a java applet as taught by Hanson in order to easily accommodate host computer systems produced by various manufacturers (see Hanson, col. 3, lines 23-25) by, for example, making the portion of the program written in Java both OS- and processor-independent (see Hanson, col. 4, lines 58-67).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D. Biagini whose telephone number is (571)272-9743. The examiner can normally be reached on weekdays from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher D. Biagini/
Primary Examiner, Art Unit 2445